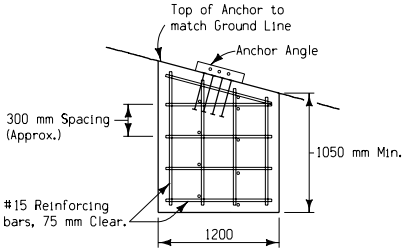
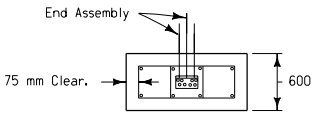
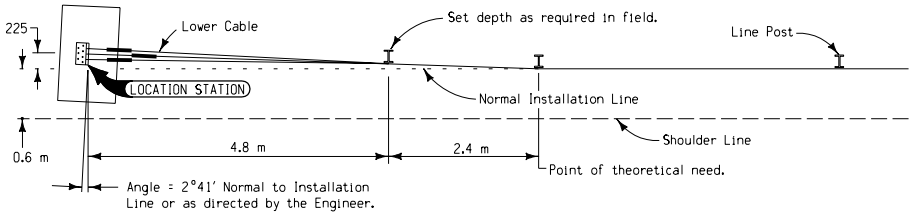


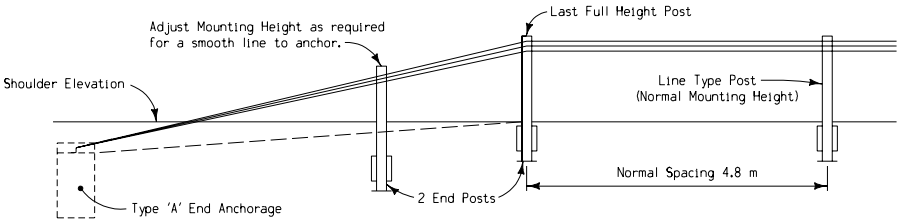


TYPE 'A' END
ANCHORAGE DETAILS

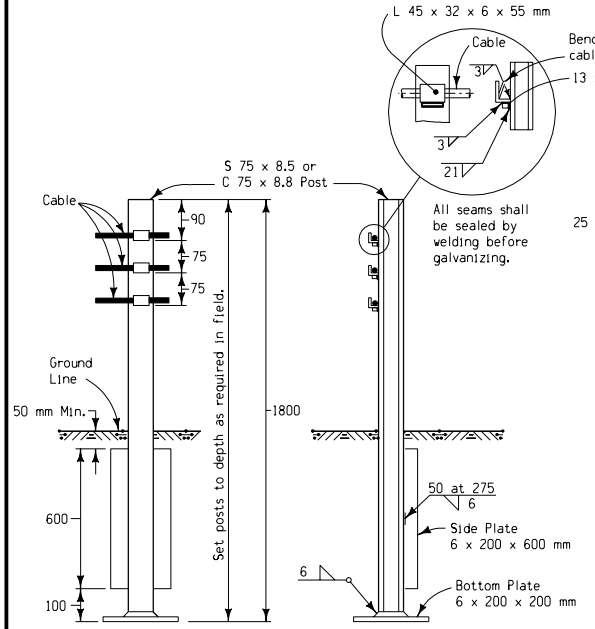
Anchor shall be cast in place with ℄ normal to line of guardrail. Excavation for anchor shall be to the neat lines indicated. Forms will be allowed only for the ends (the 600 mm dimension) of the anchor.



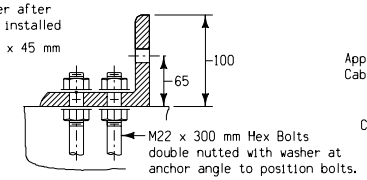
PLAN - 7.2 m ANCHORAGE SECTION

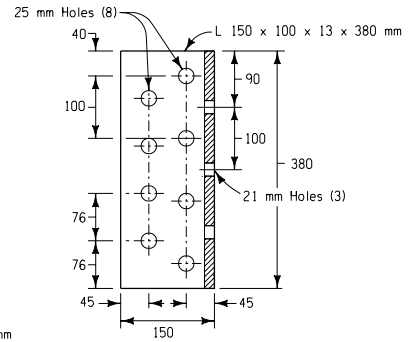


ELEVATION - TYPE 'A' END ANCHORAGE

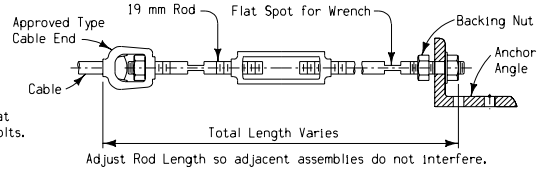


DETAILS OF END POST

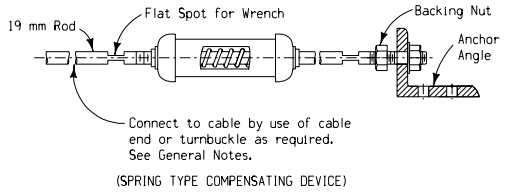




ANCHOR ANGLE



TYPICAL CABLE END ASSEMBLY



TYPICAL CABLE END ASSEMBLY

CABLE TENSION ADJUSTMENTS FOR TEMPERATURE VARIATIONS

Temperature Range Degrees Celsius	T ≥ 43	43 > T ≥ 38	38 > T ≥ 32	32 > T ≥ 27	27 > T ≥ 21	21 > T ≥ 16	16 > T ≥ 10	10 > T ≥ 4	4 > T ≥ -1	-1 > T ≥ -7	-7 > T ≥ -12	-12 > T ≥ -18	-18 > T ≥ -23	-23 > T ≥ -29
Spring Compression mm*	25	32	38	44	51	57	64	70	76	83	89	95	102	108

* From the unloaded position in each spring

GENERAL NOTES:

Details shown hereon are for the typical installation of Type 'A' End Anchorage for Cable Guardrail. The construction of Type 'A' End Anchorage for Cable Guardrail shall be done in conformance with current Standard and Supplemental Specifications. Alternate designs may be submitted to the Engineer for consideration and approval. Refer to project plan details and tabulation of installations for requirements of individual installations and for location of end anchorages.

The End Posts used in Type 'A' End Anchorages are tabulated in "Tabulation of Cable Guardrail Installations."

Turnbuckles shall be of the open type and shall each provide for a minimum takeup of 300 millimeters.

The spring type compensating device is installed to maintain cable tension for various temperature conditions. This device shall provide for 125 millimeters minimum travel and have a spring rate of 80 ± 10 newtons per millimeter. Turnbuckles are used to pretension each cable to the proper tension, depending on the temperature at the time of adjustment. The spring compression adjustments for various temperatures are listed in a table on this plan.

Turnbuckles and compensating devices shall each be equipped with adequate and proper bolts and fittings (to provide for use separately or in combination) to connect the guardrail cable to the end anchorage. Turnbuckles and compensating devices will not be paid for separately but shall be considered incidental.

Gas Metal–Arc and Flux–Cored Arc Welding may be used for welding incidental items as indicated on this sheet, provided that the fabricator furnishes certifications for the filler metal and gas, uses filler metal on the approved list furnished by the Office of Materials, uses prequalified welding procedures, and uses qualified welders approved by the Iowa D.O.T.

List of materials for the RE–29A Type 'A' End Anchorage:
- 1 Anchor Angle and Hardware
- 0.9 cubic meters Class 'C' Structural Concrete
- 27 kilograms of reinforcing steel (approx.)
- 3 Cable End Assemblies

Price bid for "Guardrail End Anchorages, Cable RE–29A," each, shall be considered full compensation for constructing the Type 'A' End Anchorage as detailed hereon.

All dimensions given in millimeters unless noted.

M

METRIC VERSION

Iowa Department of Transportation
Project Development Division

STANDARD ROAD PLAN RE-29A

REVISION: Remove note referring to Typical 8201.

REVISION NO. 10

05-24-99
APPROVED BY DESIGN METHODS ENGINEER

REVISION DATE 09-21-99

DETAILS OF CONSTRUCTION
FOR TYPE 'A' END ANCHORAGE